
TRANSNORTHERN

A LIMITED LIABILITY COMPANY

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October 3, 2002

Administrator
Federal Aviation Administration
800 Independence Avenue SW
Washington, D.C. 20591

Ladies and Gentlemen,

In accordance with the procedures outlined in 14CFR § 11.81 TransNorthern, LLC, herein referred to as TNA, is formally petitioning for an exemption from requirements of 14CFR § 43.3 to permit pilots, who have completed approved company training, to (1) remove and install passenger seats and (2) to replenish hydraulic fluid in the hydraulic reservoir of R4D-8 (Super DC-3) series aircraft operated by TNA.

SPECIFIC RULE

The FAA states in 61 FR 19489 that “Part 43 requires air carriers to use certificated mechanics for their aircrafts' maintenance and preventive maintenance needs. This requirement reflects an FAA policy that passengers of all aircraft be given a high degree of safety protection through the proper installation of cabin seats and appointments. As outlined in Appendix A, paragraph (c), of this part, removal and replacement of aircraft seats is considered preventive maintenance.” It is generally considered that the language of FAR 43xA.c Preventive maintenance (15) “*Replacing seats or seat parts with replacement parts approved for the aircraft, not involving disassembly of any primary structure or operating system*” includes the removal and or reinstallation of passenger seats in an aircraft.

Additionally, FAR 43xA.c (8) identifies “*Replenishing hydraulic fluid in the hydraulic reservoir*” as preventive maintenance.

Effective May 31, 1996 the FAA amended FAR 4.3 with the addition of “(i) *Notwithstanding the provisions of paragraph (g) of this section, in accordance with an approval issued to the holder of a certificate issued under part 135 of this chapter, a pilot of an aircraft type-certificated for 9 or fewer passenger seats, excluding any pilot seat, may perform the removal and reinstallation of approved aircraft cabin seats, approved cabin-mounted stretchers, and when no tools are required...*”.

No relief is given by regulation for aircraft with 10 through 19-passenger capacity, although we understand the restriction only applies to reinstalling not removing seats by non-mechanics.

SPECIFIC EXEMPTION SOUGHT

TNA is an Air Carrier certified under FAR 119 for On Demand FAR Part 135 operations. As such we operate single engine piston and multi-engine turbine powered aircraft limited to 9 or less passenger seats. TNA's Training Program includes "Seat Removal" training and its pilots routinely perform all duties associated with the installation and removal of passenger seats. The company performs both Cargo and Passenger operations. Often, an outbound leg will be an all cargo operation and, at a remote location the seats will be installed and the return leg will be a passenger operation.

TNA is in the final stages of the adding a R4D-8Z (Super DC-3) to its fleet. It has obtained an STC for limitation of passenger seating capacity to 19 and plans to utilize this aircraft to better serve the unique needs of the population of Alaska. We chose this aircraft specifically because of its outstanding safety record, excellent single engine capabilities and its designed ability to operate from the relatively unimproved airports found in Bush Alaska.

Specifically, TNA believes that its pilots should be able to remove and install passenger seats in 9 or less passenger aircraft for the same reasons as specified in the Federal Register: May 1, 1996 (Volume 61, Number 85), Page 19498-19502.

Additionally, TNA believes that its pilots should be able to add hydraulic fluid to the reservoir as required because, in this aircraft equivalent series, the reservoir is located on the flight deck and designed for in-flight filling if/as required.

PUBLIC INTEREST

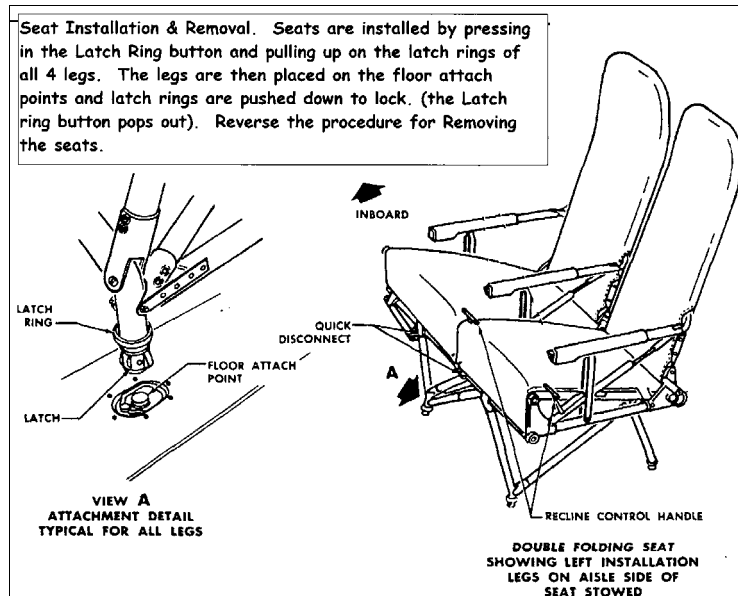
One of TNA's principal sources of revenue is to serve remote fishing lodges in Alaska. TNA chose the Super DC-3 to augment its passenger operations with its Beech 99 (STCed for 9 or less pax). TNA has met the more restrictive requirements for operations of an aircraft configured for 19 or fewer passenger seats including all the more comprehensive maintenance requirements but believes that in instances our customers contract us to carry food and supplies to the lodge and passengers from the lodge there is no benefit to requiring a mechanic to be available to install seats on one aircraft while the second aircraft has its seats reinstalled by the pilot. To reduce the payload available to the customer by the weight of a mechanic on board each flight and increase the cost of the trip by the wages paid to the mechanic simply to install seats is not in the public interest.

SAFETY

TNA's STC gives configurations for passenger seating utilizing double folding seats. Each seat is attached to the aircraft cabin floor with 4 legs. Each seat leg is secured by a very simple latching mechanism (shown below) identical to the attachments utilized on many 9 or less passenger aircraft. Removal and reinstallation of seats in accordance with the TNA STC requires no tools, no mechanical ability and no special skills. We believe that there is no advantage or increase whatsoever in safety by requiring licensed mechanic to remove or install these seats. Additionally, since the regulations require the PIC to be ultimately responsible for the safety of the flight operation, we believe that he may be even more qualified than "any mechanic" to assure

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conformity with seating configurations as defined in the AFM. This is especially true in that the pilot with seat removal/installation authority has received specific approved training for the specific aircraft whereby regulations do not require aircraft specific training for a mechanic.



Seats Conform to MIL-S-7877B and are approved for use in Aircraft with the TransNorthern LLC FAA Approved AFM Supplement No. TNADC3S-19 installed (see Attachment - p6 of this supplement) Note: That TNA anticipated obtaining approval for Pilot properly trained pilots to be able to remove or reinstall seats in accordance with an exemption however there is no authority granted for this procedure without such a company specific exemption.

Concerning refilling the hydraulic reservoir we believe that consideration should be given to the initial design of this aircraft. The hydraulic system, although well engineered by 1940's standards, was specifically designed to be easily refilled in the event of fluid depletion. All DC-3 training programs teach Pilots the type fluid, quantity and technique required to add fluid to the system on the ground or in flight. In fact, the most accurate method to determine hydraulic fluid quantity is with the engines running in cruise flight. The aircraft Equipment List includes a spare gallon of hydraulic fluid in the aircraft basis weight.

ADDITIONAL INFORMATION

Excerpts from 61 FR 19498:

"Historically, the FAA has granted exemptions to permit pilots of aircraft operated under part 135 to perform seat removal and replacement tasks only if the aircraft were operated in remote areas such as the Alaskan bush or sparsely populated areas of the Northwestern United States. Certificated mechanics servicing these areas are scarce. Many of the operations include such essential services as flying food, mail, needed goods, and people into and out of areas that may not be accessible by other modes of transportation."

"The FAA has determined that if a properly trained pilot can change seat configurations in a remote area where a certificated mechanic is not available (and which might be performed under adverse conditions), he or she would be capable of and should be allowed to perform the same conversions under better conditions such as those present at the operator's maintenance base."

“Passenger-to-cargo and passenger-to-stretcher conversions have been performed safely by pilots who have been trained to do so and who are employed by air carriers holding exemptions allowing their pilots to perform the tasks. No reported incidents or accidents have been attributed to properly trained pilots changing aircraft cabin configurations. If an air taxi operator develops an appropriate program for performing seat conversions and appropriately instructs and trains its pilots according to the program, safety levels equivalent to those achieved by certificated mechanics will be maintained.”

“This rulemaking was precipitated by the volume of exemption requests that were filed by operators who needed a shorter turn-around time to respond to emergency medical missions and other time sensitive operations, or who operated in areas where a certificated mechanic was not available. Almost all of the exemption requests were filed by operators whose airplanes are configured with nine or fewer passenger seats. As stated in the NPRM, the FAA continues to find that operators of aircraft type certificated for 10 or more passenger seats are required to have a maintenance organization in place to support their part 135 operations, and their aircraft tend to be more complex in design and construction. The FAA will continue to address operations using aircraft configured with 10 or more passenger seats on a case by case basis.”

TNA requests that consideration be given to the simplicity of seat removal/reinstallation and that TNA does have a maintenance organization in place adequate to support its operation at its base of operations in Anchorage, Alaska. If a discrepancy is noted that makes the aircraft unairworthy at a remote airfield, TNA must typically dispatch its mechanic in another aircraft to correct the problem before the flight continues. Most of TNA's operations entail flights from Anchorage to specific remote locations and then return to Anchorage. The customer is charged for ‘both legs’ and, due to the rising costs of aviation especially in Alaska, will often try to maximize his expense by filling both legs. Many times that entails carrying seats as stowed cargo on one leg.

We believe there is no justification whatsoever for the added expense of making a certified mechanic available to remove or reinstall seats at remote locations.

SUMMARY

TransNorthern LLC is requesting an exemption from FAR 43 requiring certificated mechanics to reinstall seats and replenish hydraulic fluid on it's R4D-8 Series (Super DC-3) 19 or less passenger Aircraft. It utilizes this aircraft, along with its 9 or less passenger turbo-propeller aircraft, to serve the needs of remote villages in Alaska. By STC TransNorthern's Super DC-3 is limited to a maximum of ten (10) double seats (1/2 of one seat is disabled), each with four (4) simply installed seat legs. No tools or special skills are required to reinstall seats and the company already has an approved Seat Removal/Reinstallation module in its training program.

Please contact me if any additional information is required prior to granting our petition.

Alan G. Larson
TransNorthern LLC
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ATTACHMENT #1

Page 6 of the TransNorthern LLC Airplane Flight Manual Supplement FAA approved on August 22, 2002 anticipates that a company that installs STC No. ST029196AK would request and obtain an exemption from the FAA for it's properly trained pilots to Remove and Reinstall Passenger Seats.

TRANSNORTHERN, LLC.
4841 Lakeshore Drive
Anchorage, AK 99502
Supplement No. TNADC3S-19

AFM SUPPLEMENT FOR DOUGLAS MODELS
R4D-8Z, R4D-8, and Super DC-3 with
Nineteen or Fewer Passengers and
7500 Pound Payload

INSTALLATION OF PASSENGER SEATS

Passenger seats are installed and/or removed in accordance with the manufacturer's maintenance manual (P/N 01-40NK-2, page 197, paragraph 2-332 and 2-324). Seats must be installed and/or removed by FAA licensed Airframe Mechanics, except in cases where the operator has qualified it's flight crewmembers under an FAA approved Training Program with provisions for training Pilots in the proper removal and installation of passenger seats in each specific aircraft make and model.

All passenger seats must be installed in the positions indicated by a Weight and Balance Worksheet provided by the operator that clearly shows the aircraft's empty weight and center of gravity in specific approved configuration. Seats and seat attach fittings must be FAA approved. Seats conforming to MIL-S-7877B are considered approved for installation on aircraft certified under TC6A2. Seat Attachment Studs P/N S2398830-501 as described in Navy Manual AN 01-40NK are considered approved for aircraft certified under TC 6A2. Any other seat or seat attach point must be individually approved.

On R4D-8 aircraft with Douglas P/N 2397586 seat fitting assemblies, these studs are mounted on 10-inch centers forward and aft. Fuselage Station 287.5 is the dividing line between Area "C" and Area "D". There is a lateral row of seat studs located at Station 287.5 and this document refers to those studs as "Reference" or "**Ref Studs**". Seat Locations are determined by counting the seat stud rows forward and aft of Station 287.5 (the REF Studs) and installing the front leg of Douglas P/N 72912 Seats as indicated by the following table:

PASSENGER SEAT LOCATIONS

AREA "C" CENTROID 235.3

Row 1 - Fwd seat legs are located at FS 207.5 **EIGHT Studs forward** of Ref Stud row.
Row 2 - Fwd seat legs are located at FS 247.5 **FOUR Studs forward** of Ref Stud row.

Area "D" Centroid 352.0

Row 3 - The forward seat legs are located at FS 287.5 in the Ref Stud fittings.
Row 4 - Fwd seat legs are located at FS 327.5 **FOUR Studs aft** of the Ref Stud row.
Row 5 - Fwd seat legs are located at FS 327.5 **EIGHT Studs aft** of the Ref Stud row

FAA Approved

DATE: AUG 22 2002

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